



IRVINE RANCH

LAND RESERVE™



THE IRVINE COMPANY

*The Nature
Conservancy*



1897 - 1997

IRVINE REGIONAL PARK

CENTENNIAL



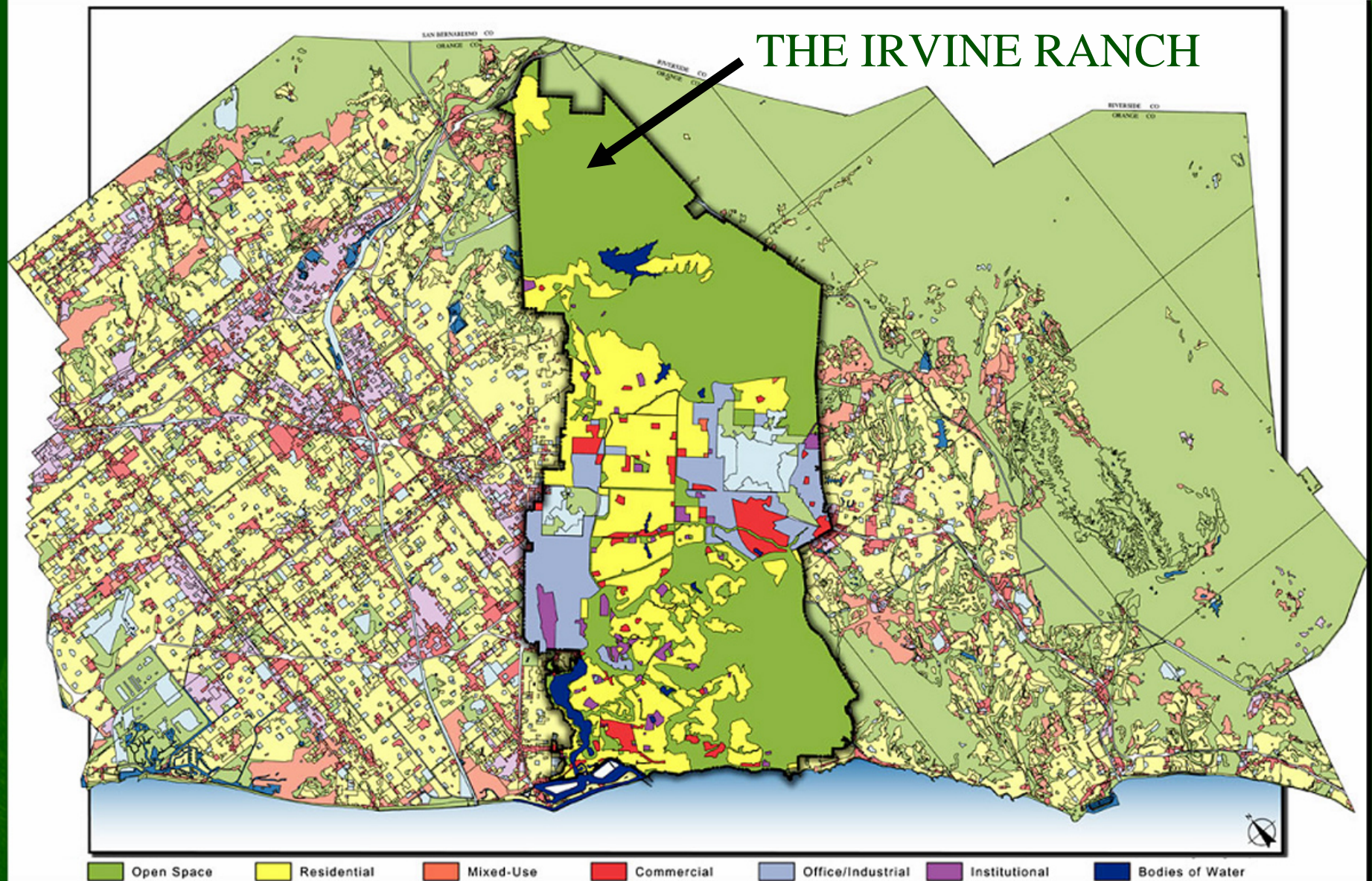


Regional Context

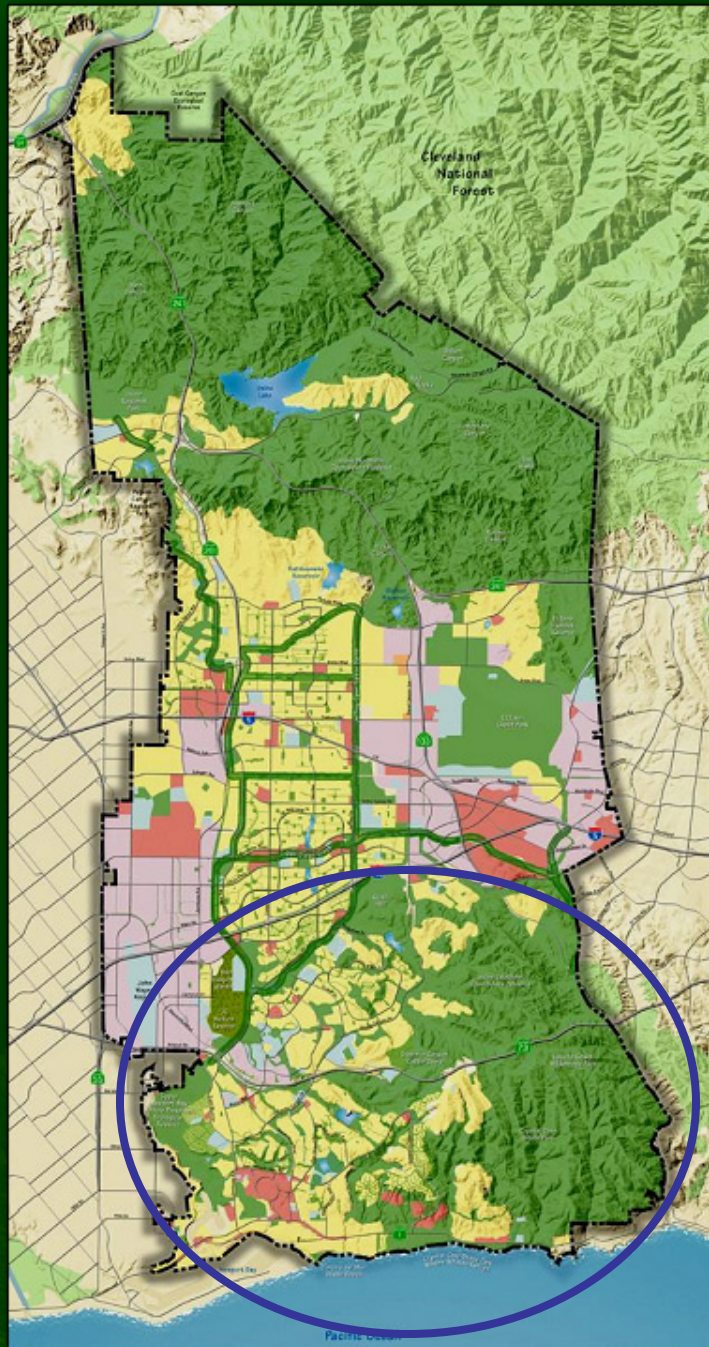


Balanced Growth and Preservation

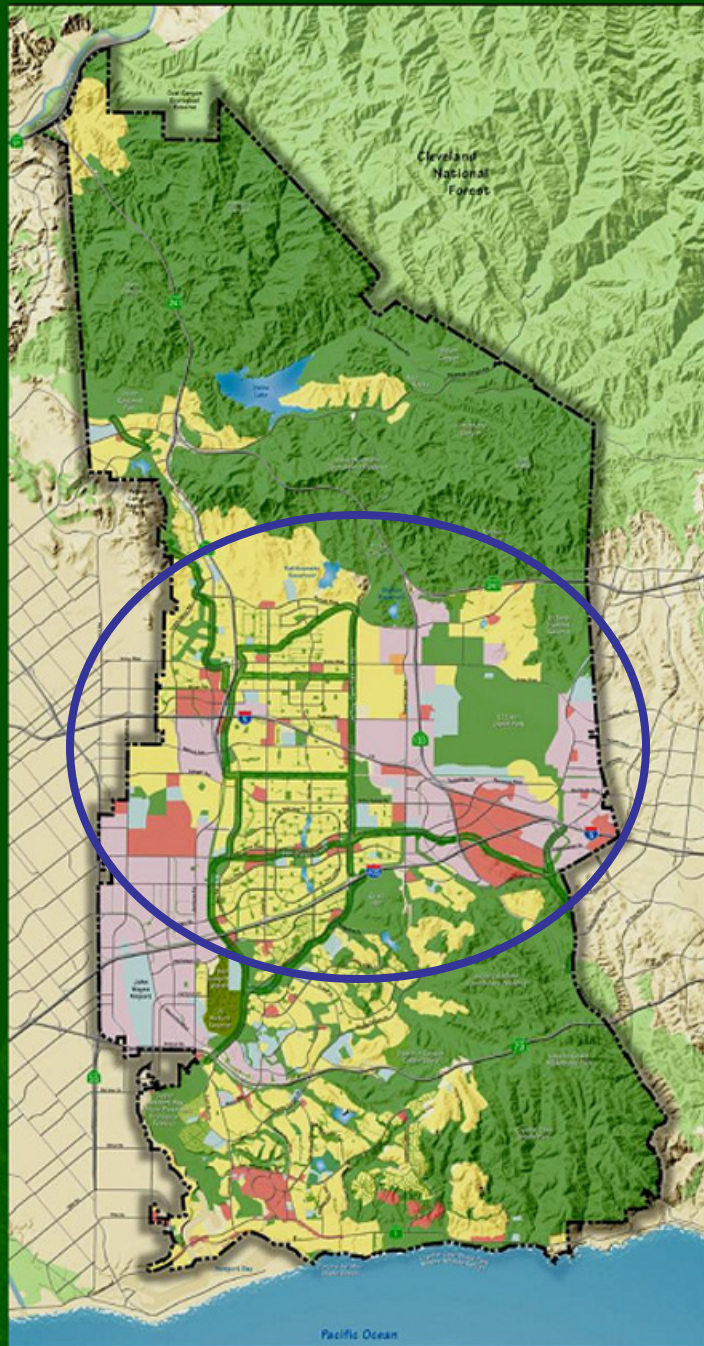
Orange County Land Use



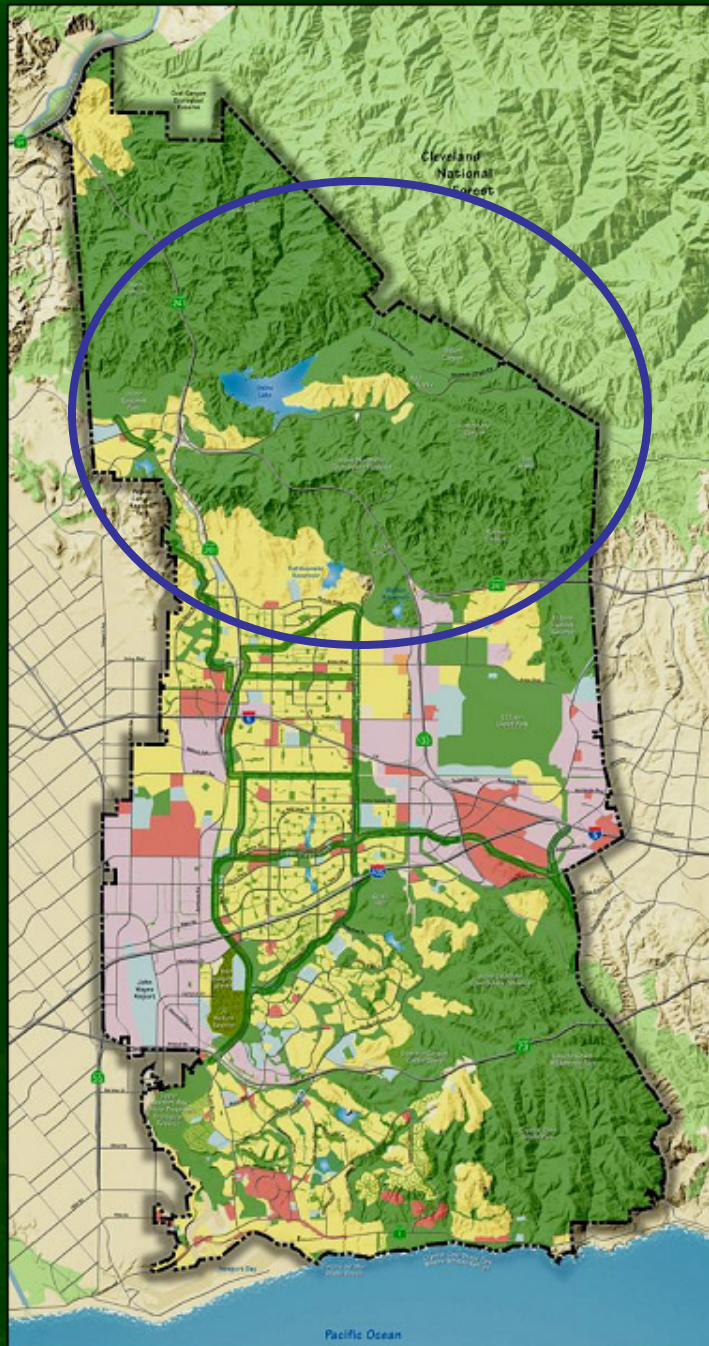




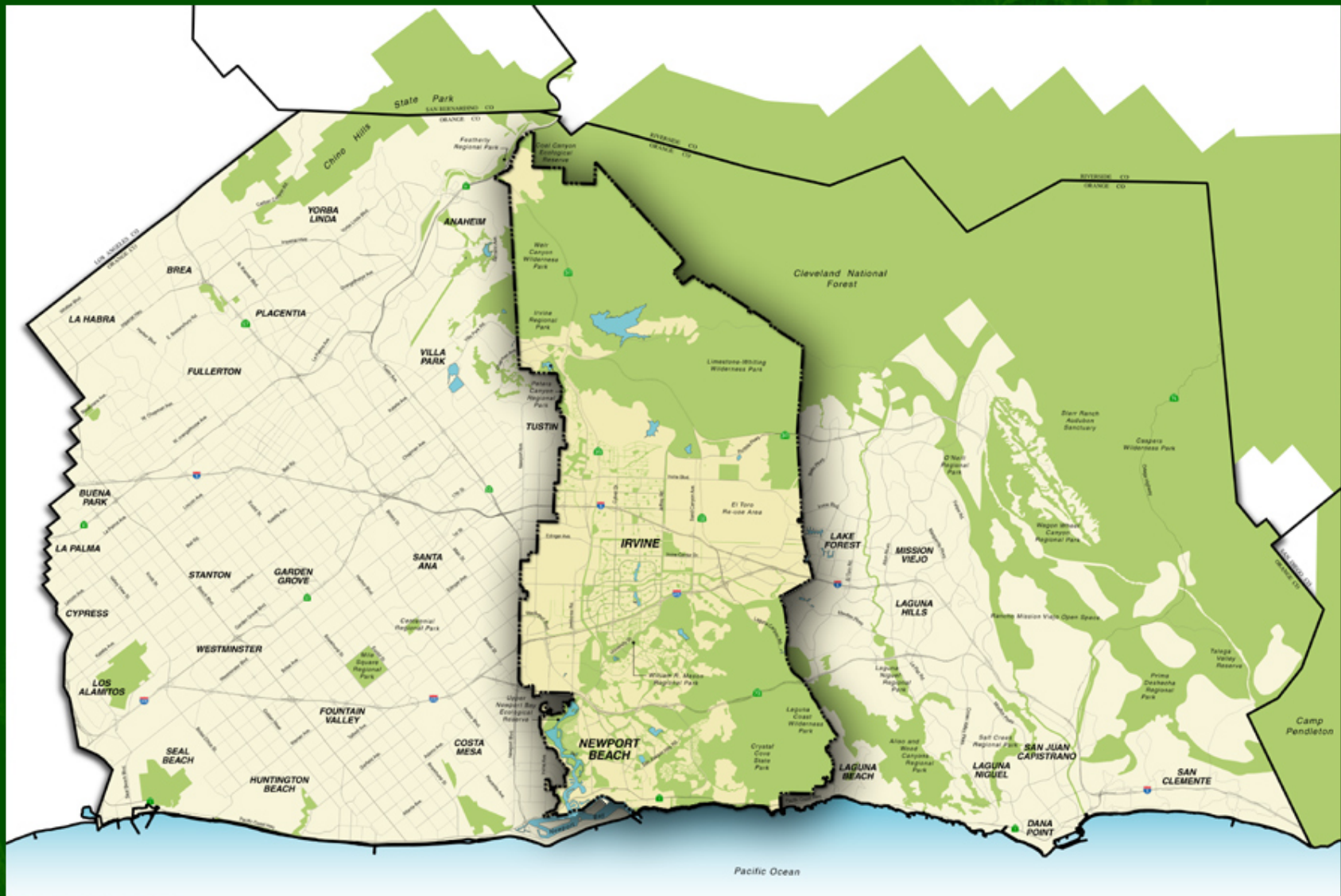
Coastal



Central Plain



Mountains

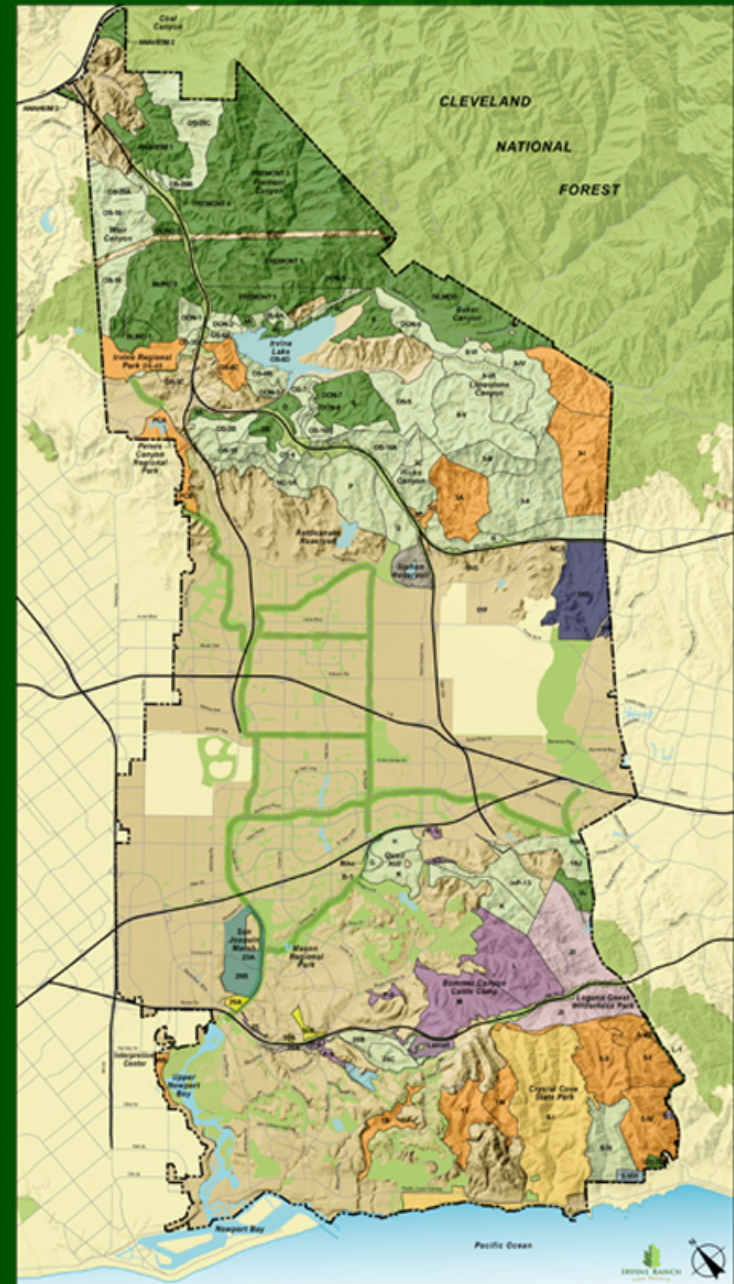


Irvine Ranch Land Reserve

Current Landowners



THE IRVINE COMPANY



Irvine Regional Park - 1897



Crystal Cove State Park - 1979

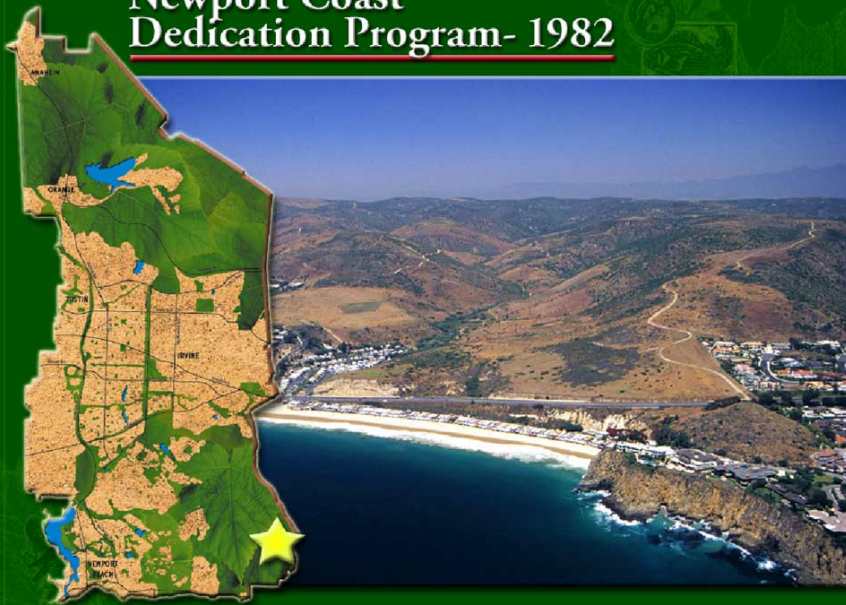


Mason Regional Park - 1969



Parks and
Recreation

Newport Coast
Dedication Program- 1982



Upper Newport Bay - 1989



City of Irvine
Open Space Agreement - 1988

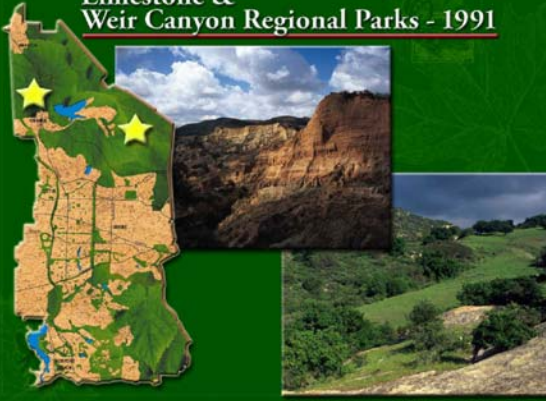


Open Space
Preservation

San Joaquin Wildlife Sanctuary - 1989



Limestone & Weir Canyon Regional Parks - 1991



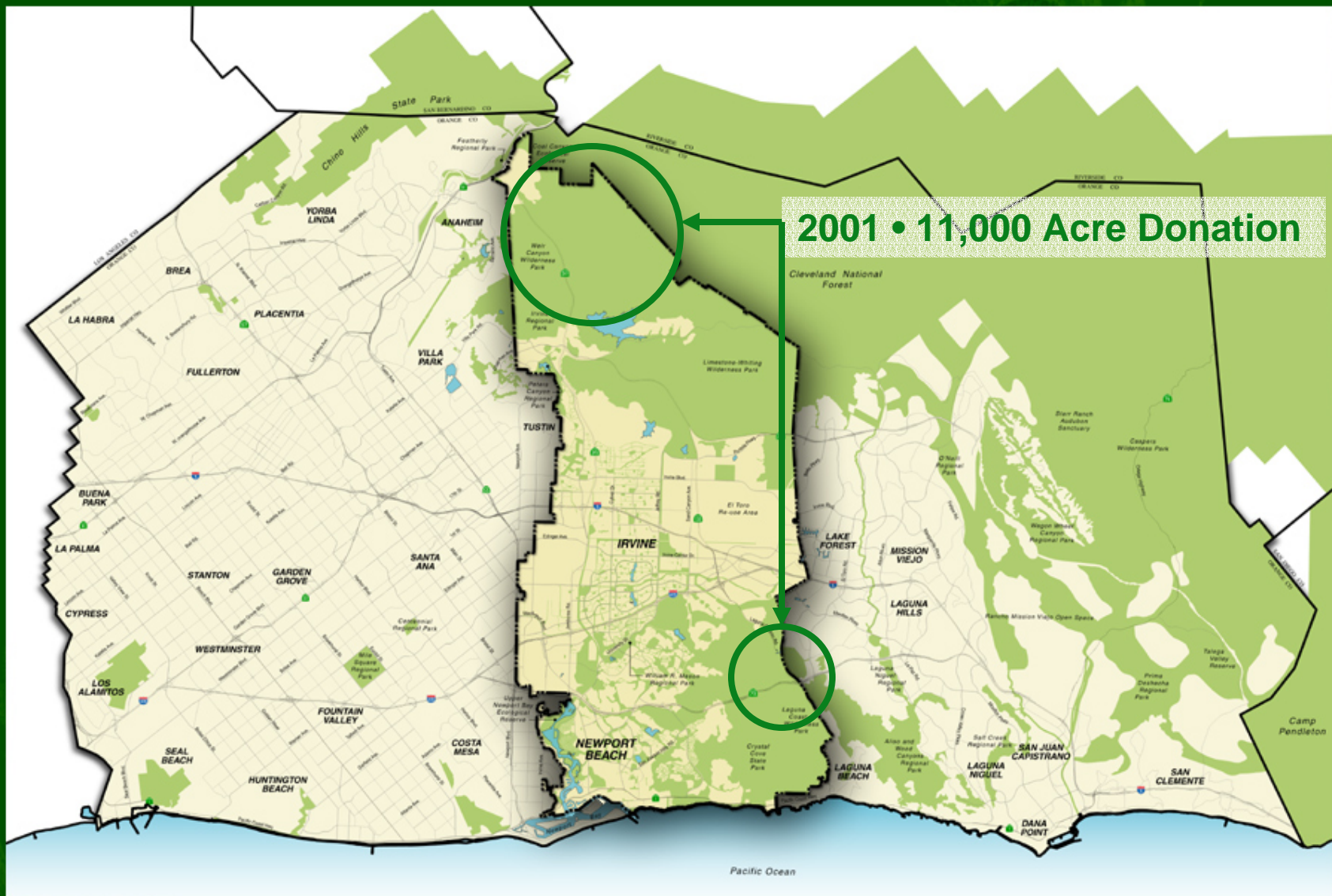
Laguna Laurel Acquisition Agreement - 1991



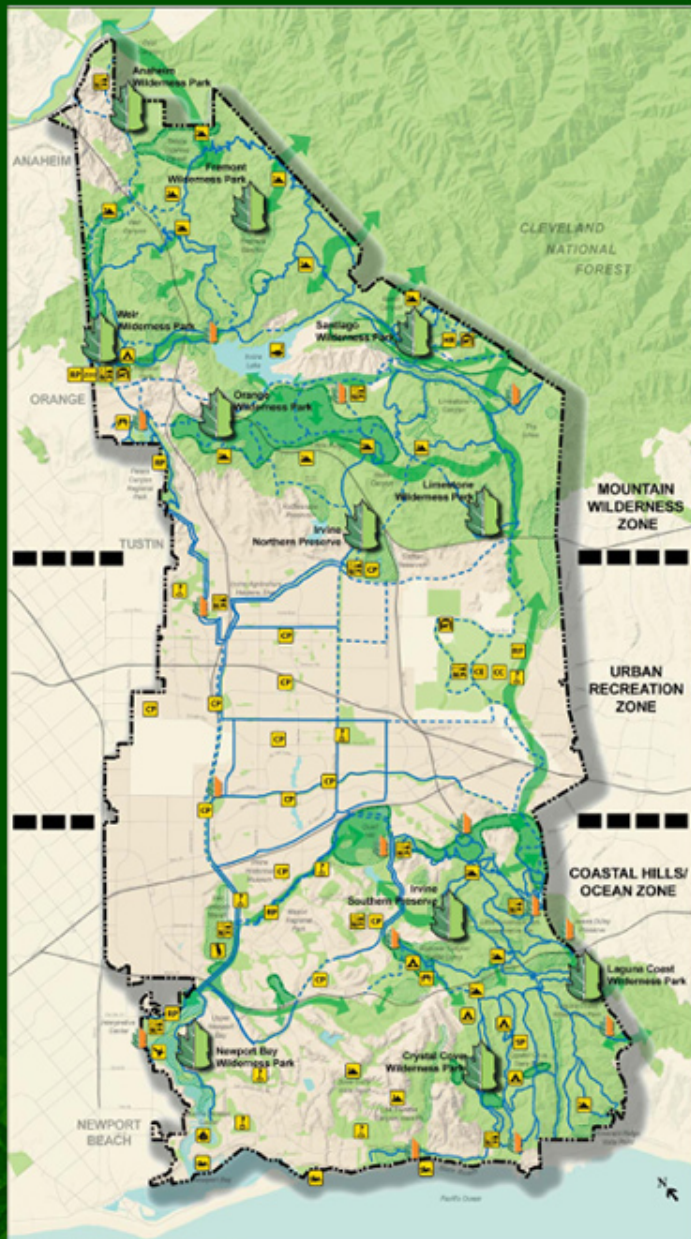
Natural Community Conservation Plan (NCCP) Reserve - 1996



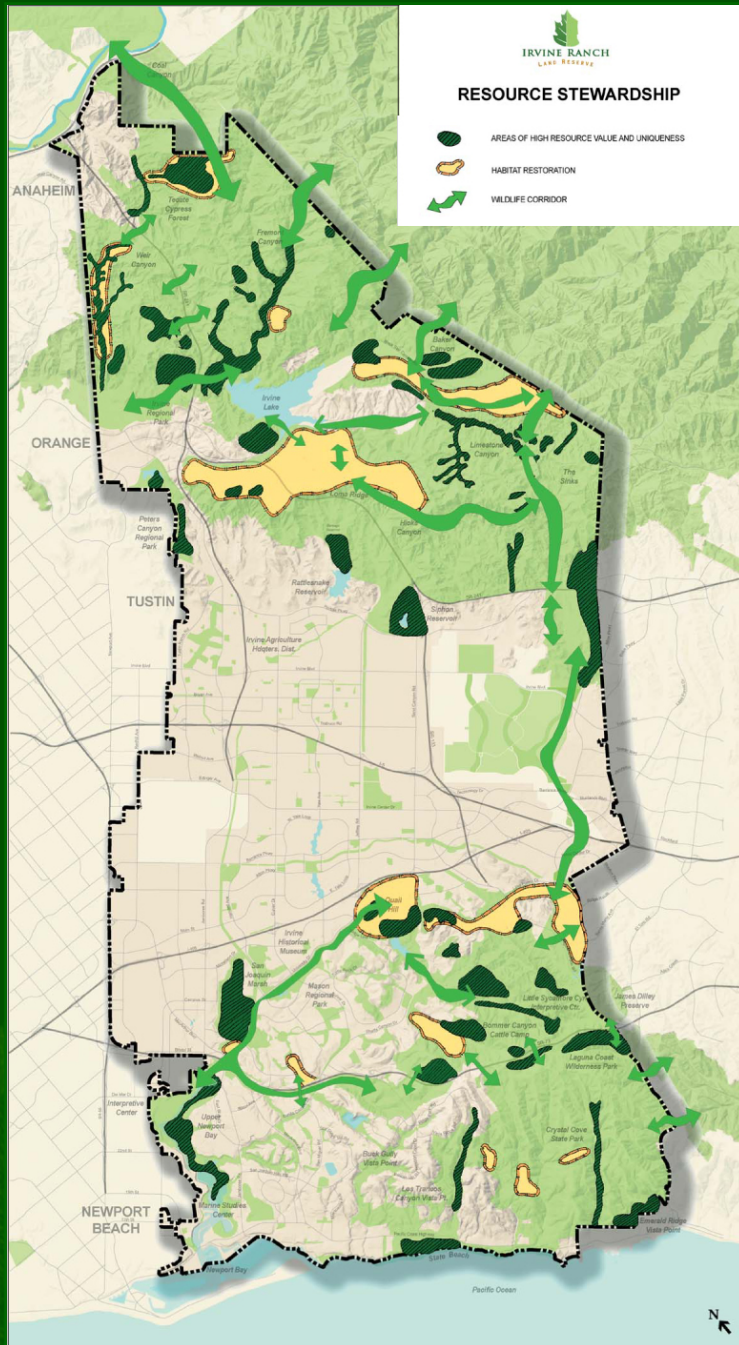
Natural Systems Preservation



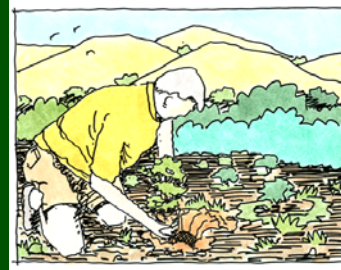
Irvine Ranch Land Reserve



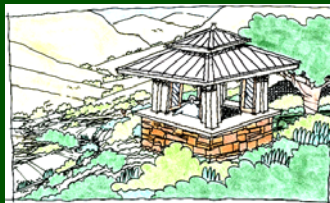
Irvine Ranch Land Reserve Vision



Resource Stewardship



Biological Management



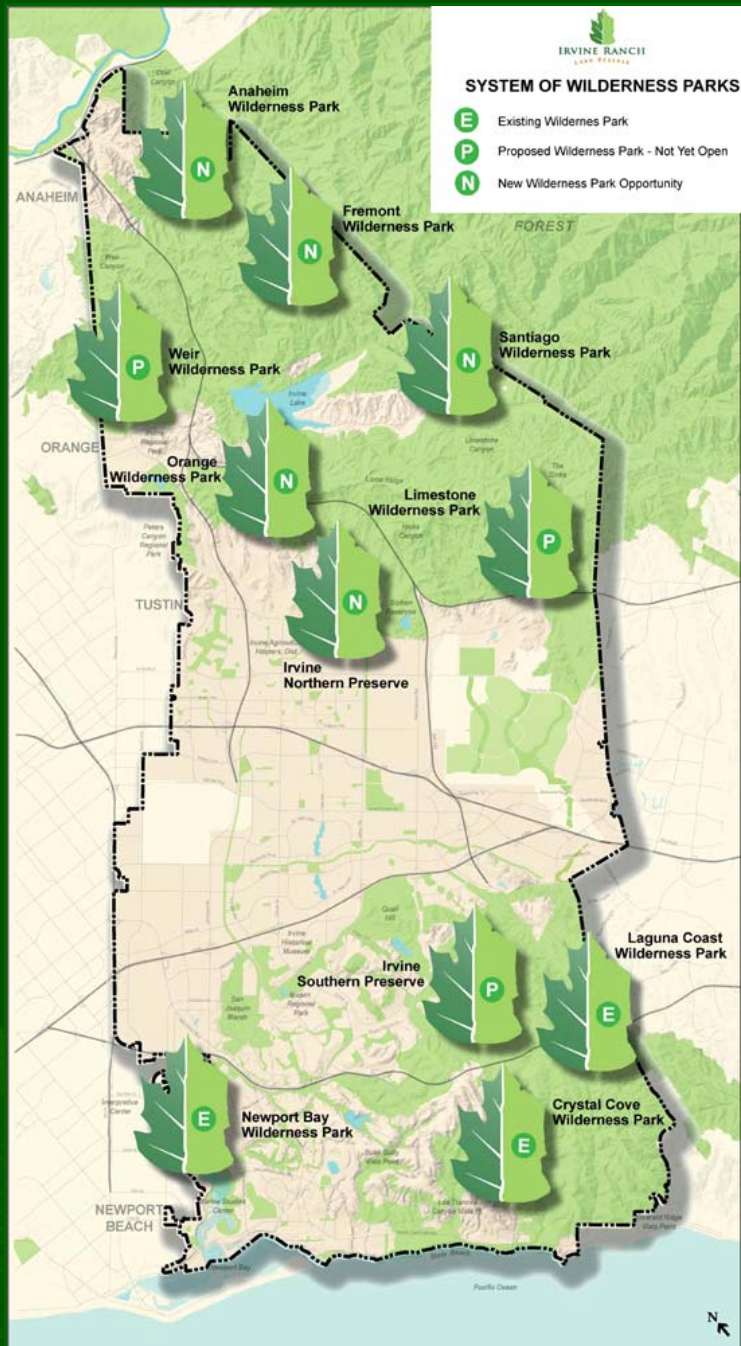
Ecological Monitoring



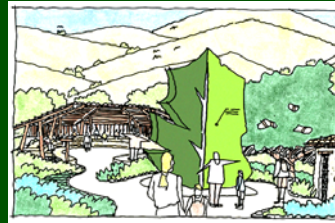
Applied Research



Education



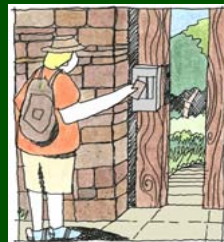
System of Wilderness Parks



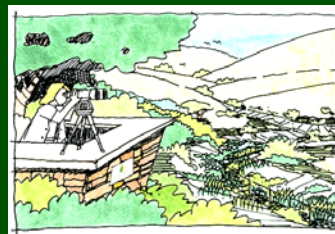
Strong Community Identity Ownership



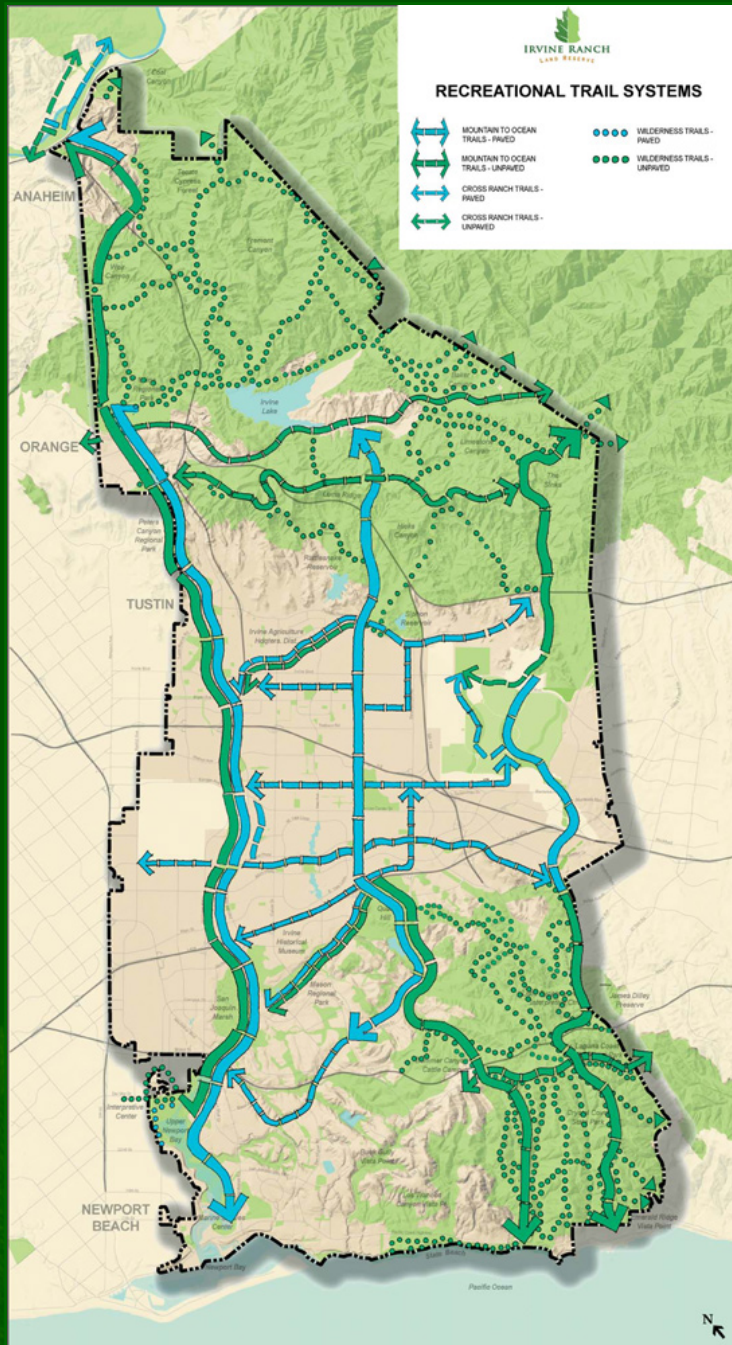
Management of Protected Resources



Innovative Forms of Public Access



Innovative Access Monitoring/Safety Management



Recreational Trail Systems



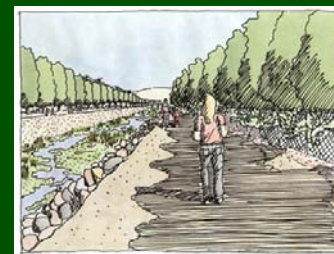
Interconnected Trail System



Tiered Level of Access

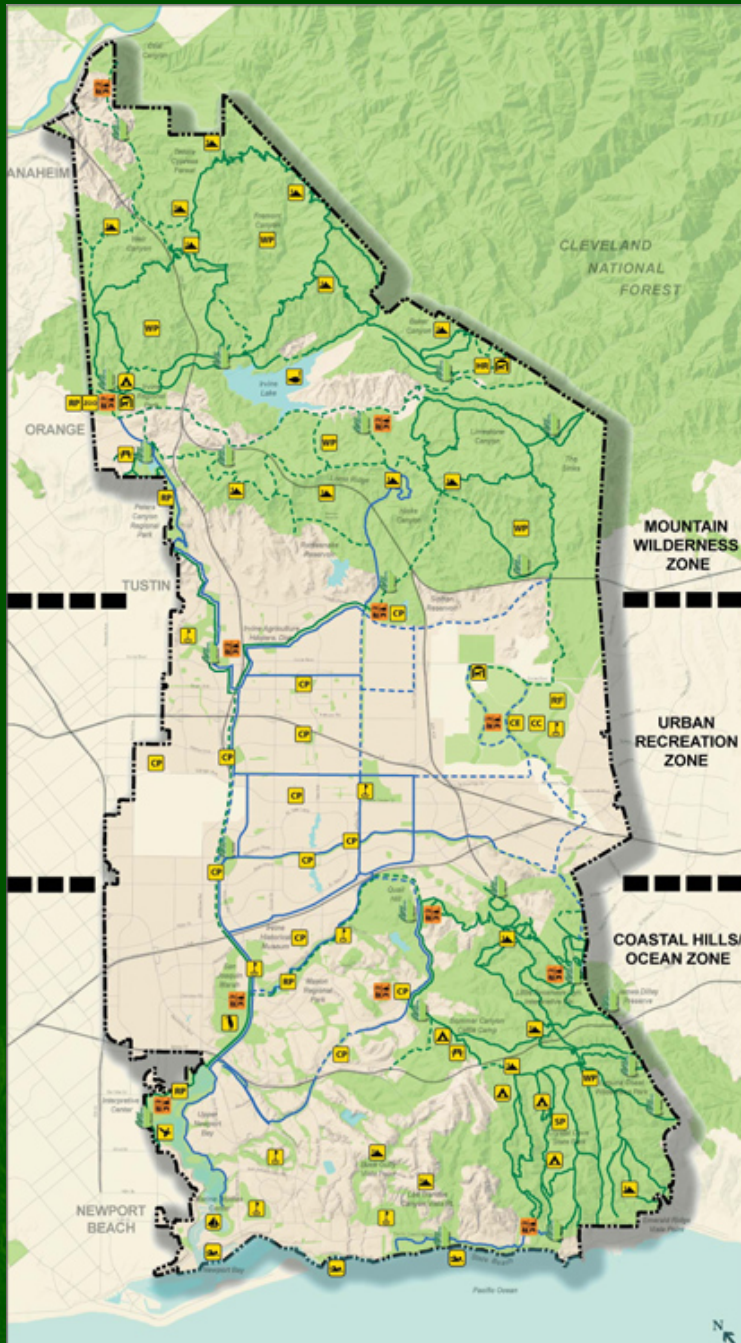


Diversity of Users



Aesthetic/Resource Enhancements

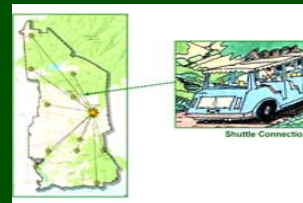
Recreational Opportunities



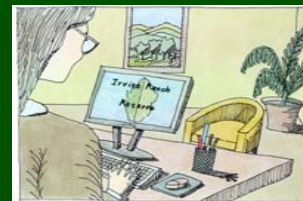
Variety of Opportunities
Natural & Man-Made



Recreational/Cultural
Opportunities



Networking of
Interpretive/Nature
Centers



Public Information
System

The Challenge

Preserving and protecting biologically important and diverse wilderness lands while simultaneously providing public access and recreation on those lands.



IRVINE RANCH

LAND RESERVE™



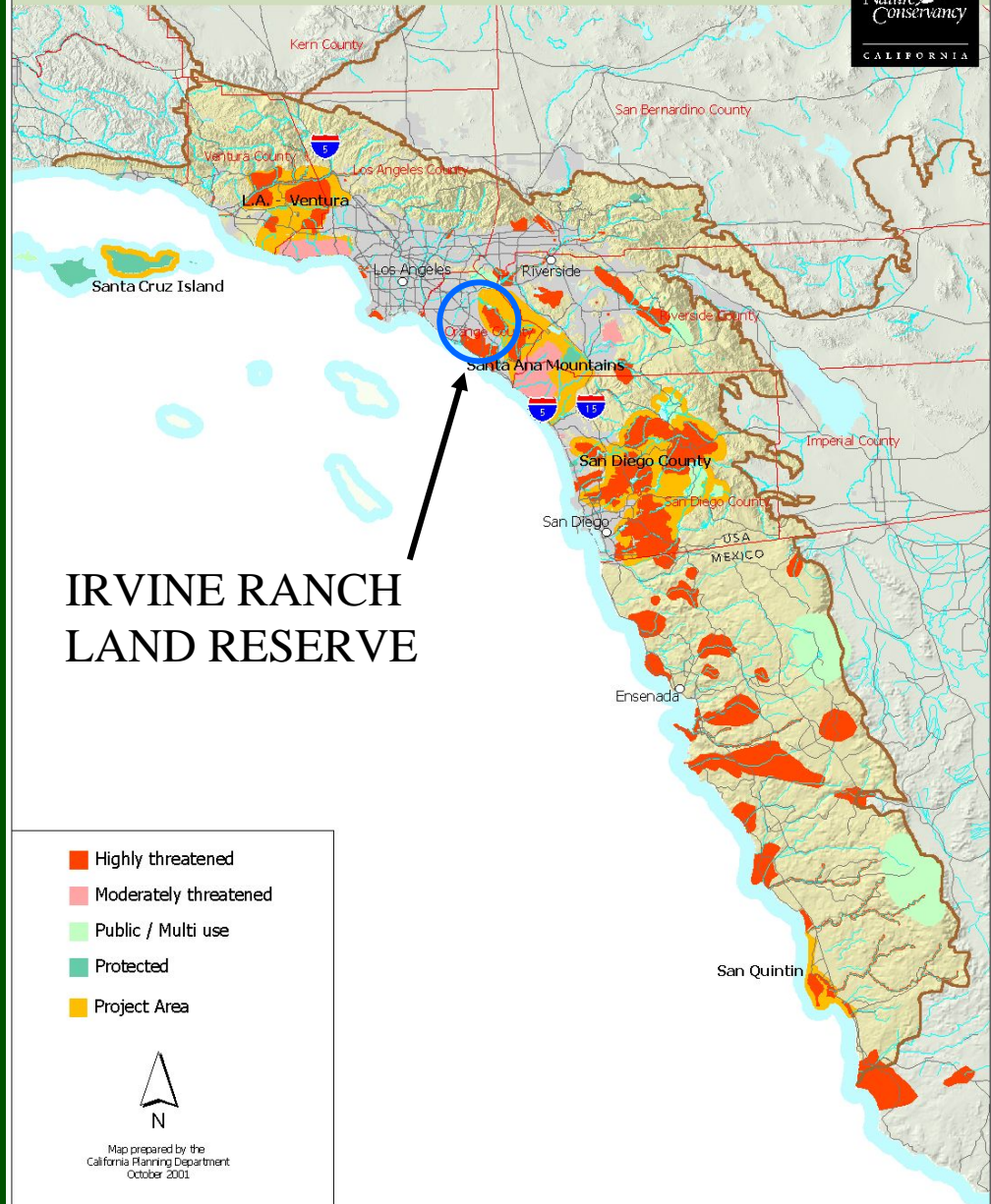
THE IRVINE COMPANY

*The Nature
Conservancy*



South Coast Ecoregion

South Coast Ecoregion



IRVINE RANCH
LAND RESERVE

- Highly threatened
- Moderately threatened
- Public / Multi use
- Protected
- Project Area



Map prepared by the
California Planning Department
October 2001

0 20 40 60 Miles

Coastal Reserve Area

Laguna Coast WP, Crystal Cove State Park,
City of Irvine Open Space Preserve





Central Reserve Area

Limestone Canyon-Loma Ridge





North Reserve Area

Weir-Blind-Fremont-Gypsum Canyons





Challenges and Opportunities

Challenges:

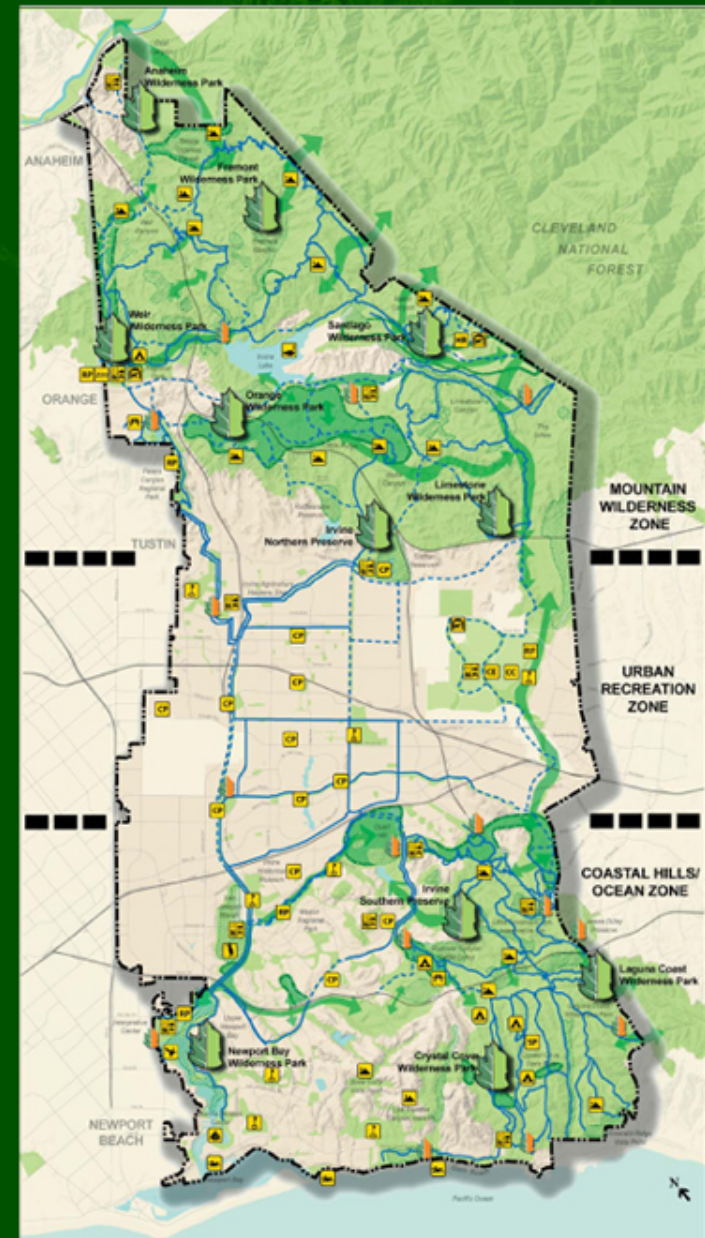
- Altered Fire Regimes
- Invasion of Exotic Species
- Recreation
- Urban/Wildland Edge Influences

Opportunities:

- Coordinated Management/
Monitoring - NCCP/NROC
- Long-Term Funding Sources
- Public Support/Interest
- Public enjoyment



Local Partners



Habitat Management

Goal:

To Develop/Implement
Coordinated Management
Programs to Protect and
Enhance Biodiversity

- Fire Management Program
- Exotic Plant and Animal Control
- Habitat Restoration
- Research and Monitoring
- Urban/Wildland Edge Management



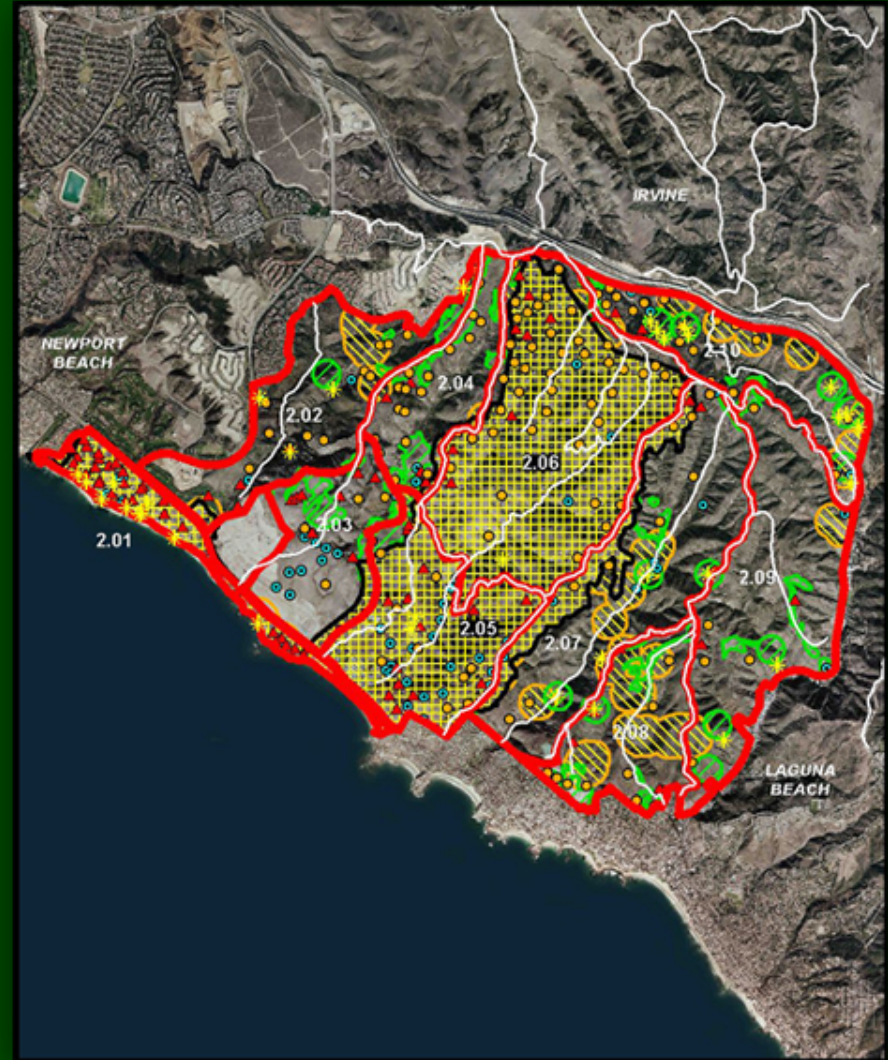
Fire Management

- Periodic fires required to maintain scrub communities;
- Too much fire can reduce scrub communities and target wildlife species;
- Over 60 percent of Reserve has burned within last 10 years;
- Fire can be a tool in the restoration of some degraded lands.



Nature Reserve of Orange County Ecological Fire Management Plan

- **Fire Suppression Plan**
Establishes appropriate fire response guidelines to be used by Fire Agencies
- **Ecological Fire Management Plan**
Identifies role of prescribed fire, fuel modification; establishes ecological fire management and monitoring policies



Exotic Species Management

Exotic Plant Control Focus

- Artichoke Thistle
- Veldt Grass
- Garland Chrysanthemum
- European Grasses/Mustard
- New Invasions: star thistle

Exotic Animal Control Focus

- Brown-headed cowbird
- African clawed frogs, bullfrog
- Exotic ant monitoring

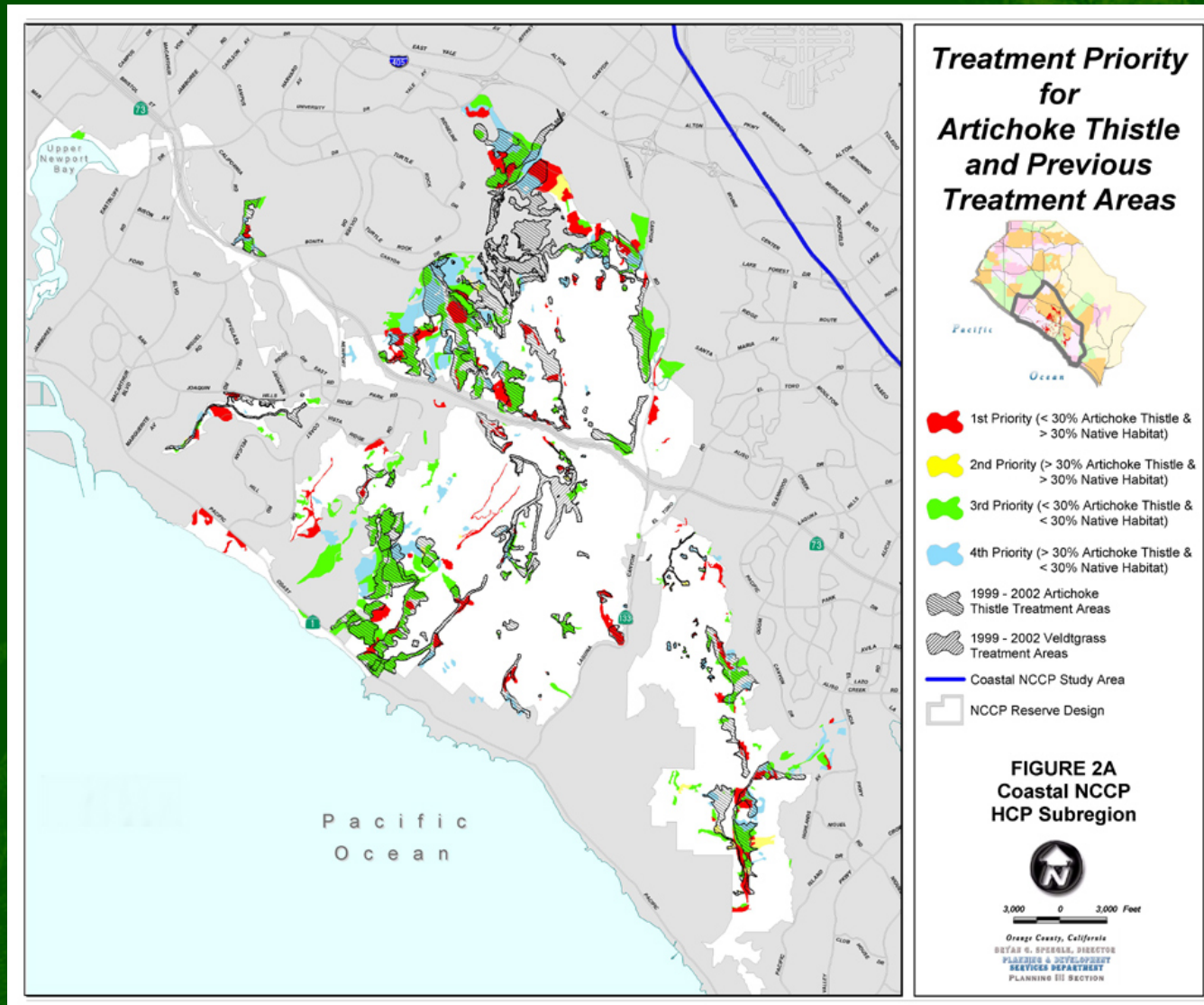


Exotic Plant Species Management Planning

- GIS Mapping of 40+ Exotic Plants of Concern
- Data gathered on exotic cover, native spp. cover, soils, accessibility
- Prioritization of exotics and treatment areas.
- Watch-list for problem exotics



Treatment Priority - Artichoke Thistle



Artichoke Thistle Control Program

- Initiated with the Coastal Reserve in 1994 following the 1993 Laguna Canyon Fire.
- Estimated 4,000 acres within entire Reserve.
- Control Funded by County of Orange, State Parks, The Irvine Company, and NROC.
- Since 1996, nearly \$1.5 million directed at control of 3,000 acres of artichoke thistle



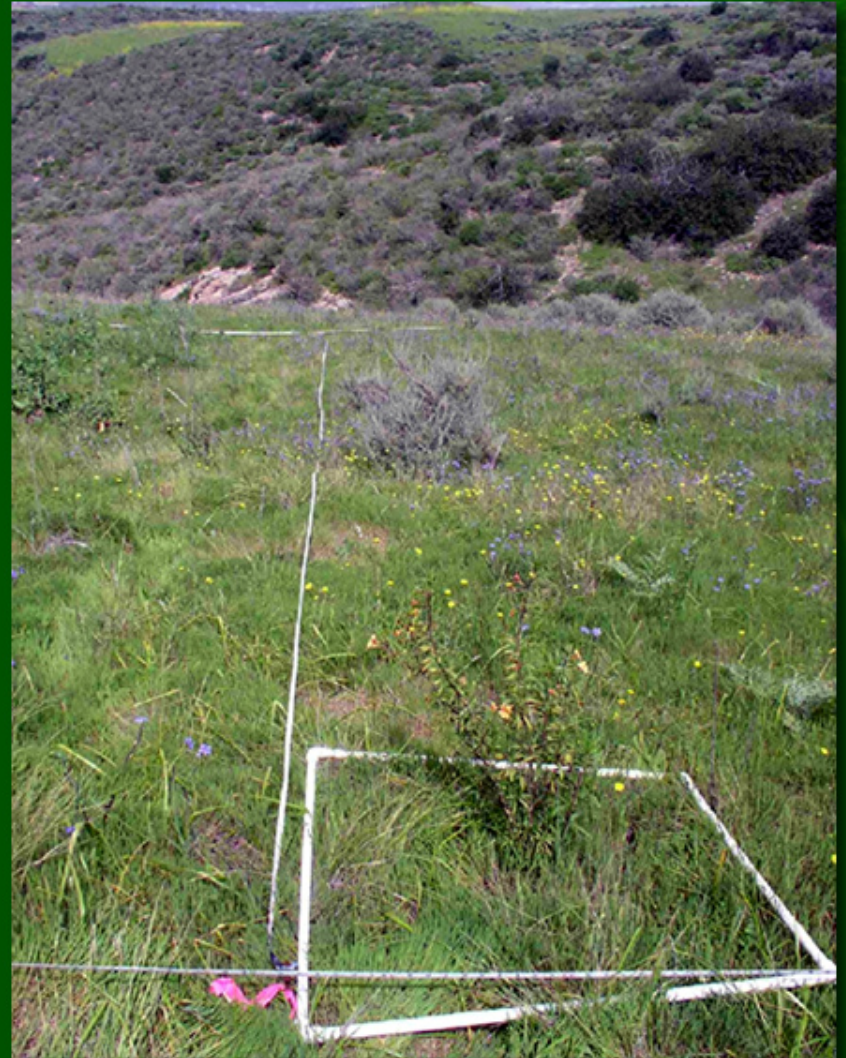
Crystal Cove State Park
14 Days after Laguna Canyon Fire

Artichoke Thistle Control Program

Pre-Treatment 2001



Post-Treatment 2003



Habitat Restoration



Native Plant Salvage Programs

- Work with Irvine Company to salvage of native shrubs, grasses and topsoil from approved development areas
- Relocate salvaged plant materials/topsoil to adjacent reserve lands in need of restoration.



Biological Monitoring Programs

Nature Reserve of OC

- Large Mammal Study
- Raptors
- Avian studies
- Rare plants
- Reptiles/Amphibians

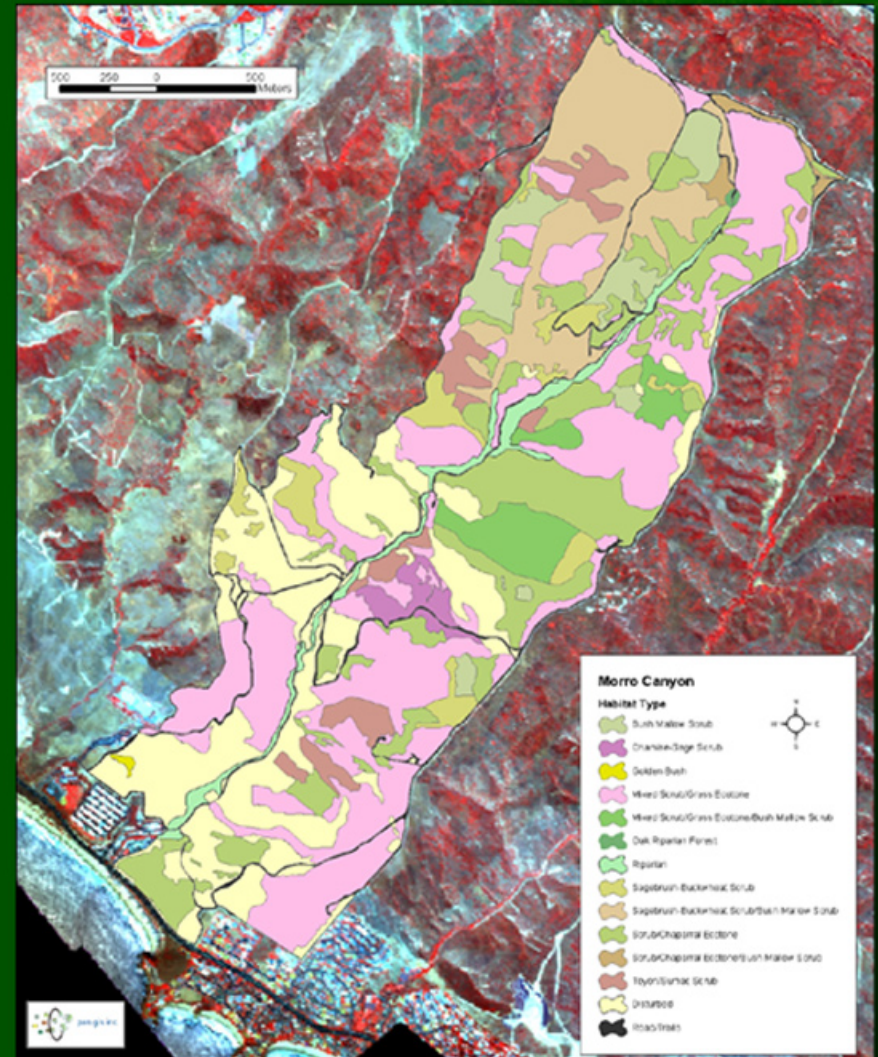


Research-Wildlife Movement Studies



Research - Vegetation Monitoring

Using low level infra-red aerial photography to develop “signatures” for the various habitat types for use in vegetation mapping and to document other changes through time (exotics, illegal trails, etc)



Research - Habitat Restoration

- Methods for coastal sage scrub restoration
- Methods for native grassland restoration
- Focus: testing treatment methods for reducing exotics and increasing natives



Managing the Urban-Wildland Edge

- *Living Close to Nature* Brochure
- Outreach Questionnaire
- Urban Edge Monitoring
- Compatible Fuel Modification Practices
- Plans for Recreation Monitoring
- Public Use/Volunteer Opportunities



Public Programs

Goal

To promote advocacy for the wildlands through public involvement and education

- Volunteer Naturalist Training Programs
- Guided Tour Programs
- Land Steward Programs
- School Programs



Partners in Public Education Programs

- Audubon Society
- California Department Fish & Game
- City of Irvine
- County of Orange
- Crystal Cove State Park Interpretive Association
- Laguna Canyon Foundation
- Laguna Greenbelt, Inc.
- The Nature Conservancy
- Upper Newport Bay Naturalists



Volunteer Naturalist Training Program

- Courses at 2 Junior Colleges
- Leadership training for guides on Reserve
 - hikes
 - mountain bikers
 - equestrians
- 60 hour training program
 - natural/cultural history interpretation
 - wilderness safety/etiquette.
- Over 500 individuals trained since 1993;
- Currently > 250 Trained Volunteer Naturalists



Guided Tour Program

- Over 30 tour types offered for hikers, mountain bikers and equestrians
- Average 60 tours per month
- Diversity of Skill Levels and interest
- Over 50,000 visitors in 2002

Irvine Ranch Land Reserve

 **THE IRVINE COMPANY**

[About the IRLR](#) [Activities](#) [Preservation](#) [Reserve Areas](#) [The Nature Conservancy](#) [Getting Involved](#)

 **Let's Go Outside!**

A wide range of activities -- from strenuous mountain-bike rides on a wilderness trail to leisurely family picnics in a regional park -- is available on the Irvine Ranch Land Reserve.

The list of activities below can be sorted by date, location, type of activity and degree of difficulty. Advance reservations are needed for the docent-led activities.

Enjoy your experience on the 50,000-acre Irvine Ranch Land Reserve!

Date	Time	Description	Reserve Area	Type	Distance	Difficulty
11/6/2003	9AM	Native plant uses hike in Weir/RR Canyons Trail Info	Weir Canyon Wilderness Area	Hiking	3-4 Miles	Moderate
11/7/2003	5PM	Full moon hike in Baker Canyon Trail Info	Santiago Canyon	Hiking	3 Miles	Moderate
11/7/2003	5PM	Full moon hike to "The Sinks"	Limestone Canyon Wilderness Area	Hiking	2.5 Miles	Moderate
11/8/2003	8AM	"The Best of Orange County" Aerobic hike	Limestone Canyon Wilderness Area	Hiking	9-10 Miles	Strenuous
11/8/2003	9AM	Family mountain bike ride in Limestone Canyon	Limestone Canyon Wilderness Area	Biking	7 Miles	Moderate
11/8/2003	9AM	Animal tracking hike in Fremont Mouth	Fremont Canyon Wilderness	Hiking	2 Miles	Moderate
11/8/2003	8AM	Hike to Tecate Cypress	Fremont Canyon Wilderness	Hiking	9-10 Miles	Strenuous
11/8/2003	9AM	Equestrian Ride (must have own horse) Trail Info	Weir Canyon Wilderness Area	Equestrian		
11/9/2003	8AM	Mountain bike ride on Fremont Loop	Fremont Canyon Wilderness	Biking	15 Miles	Strenuous
11/9/2003	8AM	Hike through LCWP/Shady/Serrano ridgelines	Laguna Coast Wilderness Park	Hiking	11 Miles	Strenuous
11/9/2003	9AM	Equestrian Ride (must have own horse) Trail Info	Weir Canyon Wilderness Area	Equestrian		
11/13/2003	9AM	Hike in Weir/Rifle Range Canyons Trail Info	Weir Canyon Wilderness Area	Hiking	3-4 Miles	Moderate
11/13/2003	9AM	Hike to "The Sinks"	Limestone Canyon Wilderness Area	Hiking	2.5 Miles	Moderate
11/15/2003	9AM	Insect hike in Dripping Springs	Limestone Canyon Wilderness Area	Hiking	3-4 Miles	Moderate
11/15/2003	5PM	Stargazing Night with OC Astronomers	Santiago Canyon	Other		

<http://www.irvineranchlandreserve.com/activities/activities.asp> (1 of 2) [11/4/2003 5:24:30 PM]

Diversity of Tours

- **Hiking**
 - 2-12 miles in length
 - Themed walks
- **Mountain Bike Rides**
 - 6-15 miles in length
 - Beginner to advanced
- **Equestrian Rides**
 - 10-15 miles in length
- **Locations**
 - Limestone Canyon
 - Weir Canyon
 - Fremont Canyon
 - Baker Canyon
 - Laguna Coast WP
 - Irvine Open Space
 - Crystal Cove State Park



Land Steward Program

- Trail Maintenance and Restoration
- Native Seed Collection;
- Habitat Restoration
- Vegetation and wildlife monitoring assistance




School Programs

- **Scout Program**
Badge Programs; Eagle Scout Projects
- **OC Dept of Education**
"Inside the Outdoors"



School Programs-Inside the Outdoors

- Science/ecosystem-based curricula for K-8 students;
- Based on state testing standards;
- Offered at 5 locations throughout Irvine Ranch;
 - Upper Newport Bay
 - San Joaquin Marsh
 - Irvine Regional Park
 - Crystal Cove SP
 - Limestone Canyon



WILLIAM M. HABERMEN
County Superintendent of Schools

inside the OUTDOORS

Science Study Programs

[Click Here For an Update on the Fire Situation at Outdoor Science School!](#)

[Jobs](#)

[School Program](#)


[Field Program](#)

[Outdoor Science School](#)


[Outdoor Science Foundation](#)

[Standards](#)


[Maps](#)




[Traveling Scientist](#)




[Field Program](#)



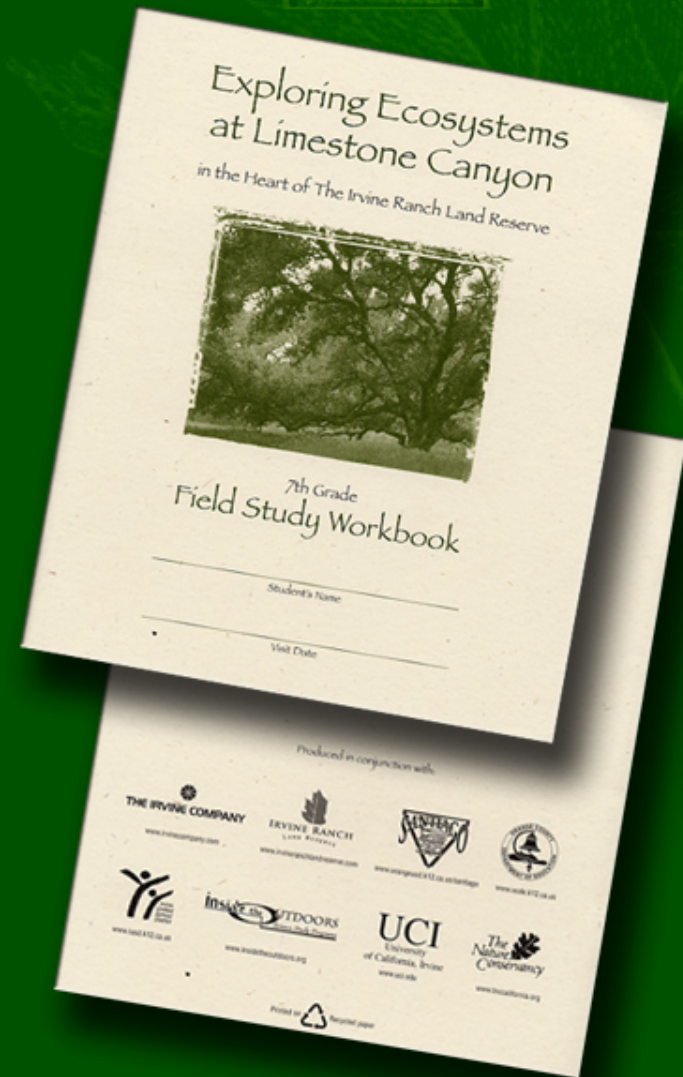
[Outdoor Science School](#)

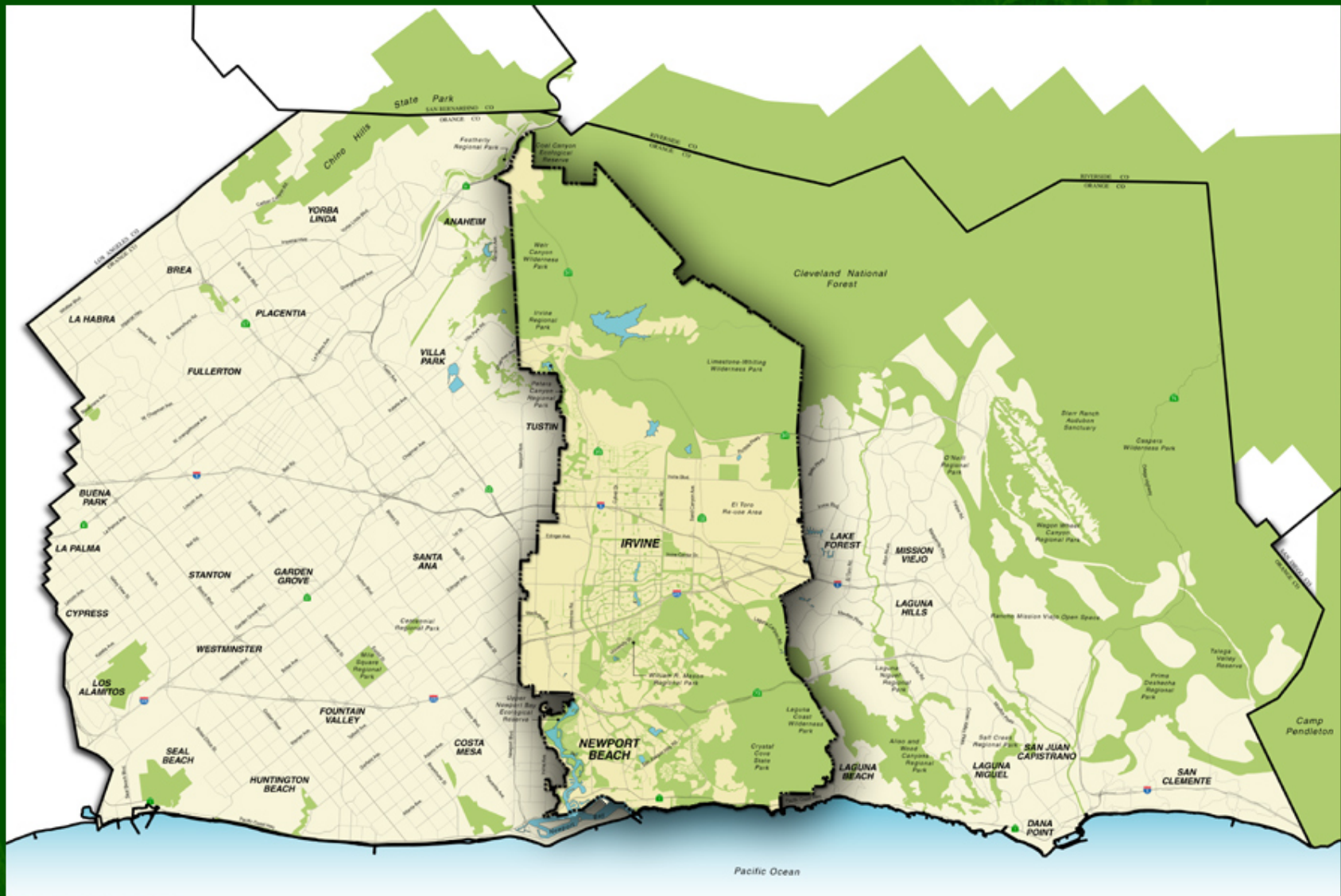




School Programs -Limestone Canyon

- Orange and Irvine School Districts
- 7th/8th Grade Program
- Program integrated within larger curricula: art, music, math, literature
- Focus: Importance of conservation efforts and systems/natural processes





Irvine Ranch Land Reserve





IRVINE RANCH

LAND RESERVE™



THE IRVINE COMPANY

*The Nature
Conservancy*

